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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,870	07/22/2003	Alvin J. Marx	P-7618.6(CIP)	7648
44800	7590	09/13/2007	EXAMINER	
MICHELLE L. EVANS			MATTER, KRISTEN CLARETTE	
GUNN & LEE, P.C.				
700 NORTH ST. MARY'S, SUITE 1500			ART UNIT	PAPER NUMBER
SAN ANTONIO, TX 78205			3771	
			MAIL DATE	DELIVERY MODE
			09/13/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/624,870	MARX, ALVIN J.	
Examiner	<b>Art Unit</b>		
Kristen C. Matter	3771		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 22 July 2003.

2a)  This action is FINAL.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-19 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-19 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 22 July 2003 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7/22/03.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.  
5)  Notice of Informal Patent Application  
6)  Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Oath/Declaration***

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

In the instant case, reference to "information which is material to the examination" should be changed to --information which is material to the patentability-- and reference to 37 CFR 1.56(a) should be changed to --37 CFR 1.56--.

### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 202, 222 (Figure 2), and 580 (Figure 6). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

The disclosure is objected to because of the following informalities: please note that the current status of parent application US Serial No. 10/075,900 is now abandoned.

Appropriate correction is required.

***Claim Objections***

Claim 10 is objected to because of the following informalities: in line 3, "the outside of said blower housing" should be changed to --an outside of said blower housing-- because an outside of the housing has not been positively claimed yet. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, use of the language "two filters secured by wire mesh" is confusing because it is unclear whether the two filters themselves are secured together by the wire mesh or whether there are two separate filters each one having a wire mesh to secure it to the cartridge.

Claims 3-9 are dependent on claim 2 and are therefore rejected for the reasons outlined above with respect to claim 2.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Conner (US 4,590,951) in view of Japuntich et al. (US 6,805,124).

Regarding claim 1, O'Conner discloses an air filtering apparatus comprising a face mask (1) adapted to be held on a head by straps (see figure 4), at least one one-way inlet valve (13) mounted on the face mask, a one-way outlet valve (2) for release of exhaust gases, a blower housing (5) defined by a pressure plenum (see reference area 8 on Figure 2 in which air pressure is positive with respect to the pump) and a vacuum plenum (see reference area 10 on Figure 2 in which the air pressure is negative with respect to the pump), at least one tube (4) connecting the face mask to the blower housing, a blower (col. 3, lines 24-36) within the blower housing having an air flow means (i.e., fan) and driven by a power source (6), flow openings (10) in the blower housing, and at least one removable (via threads) filter cartridge (11) over said flow openings. The difference between O'Conner and claim 1 is a filter being positioned under the exhaust valve. However, Japuntich et al. disclose, in an air filter face mask, a filter positioned under an exhaust valve for allowing rapid evacuation of exhaust gases from the mask while also protecting

other persons for being exposed to contaminants in the exhale flow stream (abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided O'Conner's device with an exhalation filter as taught by Japuntich et al. in order to protect other persons from contaminants in the exhale flow path.

Regarding claims 10-13, the device disclosed by O'Conner and Japuntich et al. has all of the structural limitations needed to perform the recited method steps and is fully capable of doing so. It would have been obvious to one of ordinary skill in the art at the time the invention was made, upon seeing the modified device, to perform the recited method steps of the instant claim (i.e., verifying the filter cartridge is clean). In addition, O'Conner discloses an ON/Off switch (7) for operating the filtering device.

Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Conner and Japuntich et al. as applied to claims 1 and 10-13 above, and further in view of Bar-Yona et al. (US 5,022,900).

Regarding claim 2, the modified O'Conner device is silent as to the at least one filter cartridge having two filters secured by wire mesh. However, Bar-Yona et al. disclose a filter cartridge for use in a forced ventilation apparatus comprising two filters (22 and 24) secured by wire mesh (26) (see Figure 3 and column 3, lines 5-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a filter cartridge with two filters secured by wire mesh as taught by Bar-Yona et al. in the modified O'Conner device because it would have provided a means for removing both particulates and gaseous contaminants from the air. Furthermore, O'Conner discloses that the filter cartridge can comprise

particulate and/or gas vapor material (column3, lines 30-35), so it appears as though the modified device would perform equally well with the filter cartridge disclosed by Bar-Yona et al.

Regarding claims 3 and 4, O'Conner discloses the filter cartridges can be threaded to the housing (column 3, lines 30-35). The external and internal threads on the cartridge and housing would constitute channels and a corresponding number of connectors.

Regarding claim 5, O'Conner discloses batteries (6).

Regarding claim 6, O'Conner discloses a fan for producing the air flow (column 3, lines 24-26).

Claims 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Conner and Japuntich et al. as applied to claims 1 and 10-13 above, and further in view of Elstran et al. (US 5,592,935).

Regarding claims 14 and 15, the modified O'Conner device does not disclose primary tubing connected to the blower housing and two lengths of secondary tubing connected to the face mask. However, Elstran et al. discloses, in an air filtering device, primary tubing (36) connected to a source of positive pressure (38) and two lengths of secondary tubing (see Figure 11) connected to a face mask. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a tubing assembly comprising primary tubing and two lengths of secondary tubing as taught by Elstran et al. in the modified O'Conner device in order to keep the respirator evenly balanced on the user's head and to better distribute the weight of the device. In addition, it appears as though the device disclosed by O'Conner would perform equally well with secondary tubing as disclosed by Elstran et al.

Regarding claim 16, O'Conner discloses the power means (6, 7) being isolated from the blower housing (see Figure 1), which would allow the air flow means to be easily cleaned.

Regarding claim 17, the modified O'Conner device has all of the structural limitations needed to perform the recited method steps and is fully capable of doing so. It would have been obvious to one of ordinary skill in the art at the time the invention was made, upon seeing the modified device, to perform the recited method steps of the instant claim (i.e., detaching the tube and face mask for replacement as needed).

Regarding claims 18 and 19, O'Conner discloses a battery operated motor (column 3, lines 24-30).

Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Conner, Japuntich et al., and Bar-Yona et al. as applied to claims 2-6 above, and further in view of Elstran et al. The modified O'Conner device is silent as to primary tubing connected to the blower housing and two lengths of secondary tubing connected to the primary tubing by a y-connector and to the face mask by a gasket. Elstran discloses an air filtering device comprising primary tubing (36) connected to a source of positive pressure (38) and two lengths of secondary tubing (see Figure 11) by a y-connector (36). The secondary tubing is connected to a face mask by gaskets (55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a tubing assembly comprising primary tubing and two lengths of secondary tubing as taught by Elstran et al. in the modified O'Conner device in order to keep the respirator evenly balanced on the user's head and to better distribute the weight of the device.

In addition, it appears as though the device disclosed by O'Conner would perform equally well with secondary tubing as disclosed by Elstran et al.

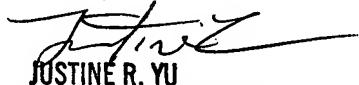
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristen C. Matter whose telephone number is (571) 272-5270. The examiner can normally be reached on Monday - Friday 9-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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9/11/07